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| 10/616,860  | 07/10/2003        | Frank J. Cuccias     | 45118-00067         | 1473             |
| 25231 7590 02/09/2007<br>MARSH, FISCHMANN & BREYFOGLE LLP<br>3151 SOUTH VAUGHN WAY<br>SUITE 411<br>AURORA, CO 80014 |                   |                      | EXAMINER            |                  |
|   |                   |                      | SELBY, GEVELL V     |                  |
|   |                   |                      | ART UNIT            | PAPER NUMBER     |
| ACKORA, CO 000  | 014               |                      | 2622                |                  |
|   |                   |                      |                     |                  |
| SHORTENED STATUTORY PE  | ERIOD OF RESPONSE | MAIL DATE            | DELIVERY MODE       |                  |
| 3 MONTHS  |                   | 02/09/2007           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  | Application No.       | Applicant(s)      |  |  |  |
|--|-----------------------|-------------------|--|--|--|
|  | 10/616,860            | CUCCIAS, FRANK J. |  |  |  |
| Office Action Summary  | Examiner              | Art Unit          |  |  |  |
|  | Gevell Selby          | 2622              |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |                       |                   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                       |                   |  |  |  |
| Status   |                       |                   |  |  |  |
| 1) Responsive to communication(s) filed on   |                       |                   |  |  |  |
| ·— · · · · · · · · · · · · · · · · · ·   | action is non-final.  | ,                 |  |  |  |
| · <u> </u>   |                       |                   |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |                       |                   |  |  |  |
| Disposition of Claims  |                       |                   |  |  |  |
| 4)⊠ Claim(s) <u>1-46</u> is/are pending in the application.  |                       |                   |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |                       |                   |  |  |  |
| 5) Claim(s) is/are allowed.  |                       |                   |  |  |  |
| 6)⊠ Claim(s) <u>1-17,19-41 and 44-46</u> is/are rejected.  |                       |                   |  |  |  |
| . 7) Claim(s) <u>18,42 and 43</u> is/are objected to.  |                       |                   |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement. | •                 |  |  |  |
| Application Papers   |                       |                   |  |  |  |
|  |                       |                   |  |  |  |
| 9) The specification is objected to by the Examiner.   |                       |                   |  |  |  |
| 10)⊠ The drawing(s) filed on <u>01 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.   |                       |                   |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |                       |                   |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |                       |                   |  |  |  |
| Priority under 35 U.S.C. § 119   |                       |                   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:   |                       |                   |  |  |  |
| 1. Certified copies of the priority documents have been received.  |                       |                   |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |                       |                   |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |                       |                   |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |                       |                   |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |                       |                   |  |  |  |
|  |                       |                   |  |  |  |
|  |                       |                   |  |  |  |
| Attachment(s)  |                       |                   |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary  | (PTO-413)         |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.   |                       |                   |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date   | 6) Other:             | аселс Аррисаціол  |  |  |  |

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### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-4, 12, 15, 20-23, 25, 27, 28, 31, 32, 34, 36, 38, 40, 41, and 44-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Scaduto, US 6,429,936.

In regard to claim 1, Scaduto, US 6,429,936, discloses an infrared camera system comprising:

a lens (see figure 6, element 230) configured to collect optical energy conveyed from a subject;

a filter (see figure 6, elements 110 and 210) providing a plurality of pass bands associated with different center wavelengths within an infrared portion of the electromagnetic spectrum, said filter being operable to pass filter optical energy collected by said lens in accordance with any selected one of its plurality of pass bands (see column 6, lines 24-29 and column 8, lines 2-8: plurality of bandpass filters range from 200-1000 nm);

an optical detector (see figure 6, element 261) operable to generate an electrical signal representing an image of the subject in response to optical energy collected by said lens, pass filtered by said filter in accordance with a desired pass

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band selectable from among the plurality of pass bands, and subsequently incident on said optical detector (see column 8, lines 30-40); and

a control device (see figure 6, elements 270 and 280) operable to select the desired pass band from among the plurality of pass bands provided by said filter (see column 8, lines 62-66 and column 10, lines 19-21 and 53-63: the control device controls the movement of the filter wheel to selective the appropriate filter).

In regard to claim 2, Scaduto, US 6,429,936, discloses the system of claim 1 wherein at least two of the pass bands of said filter overlap (see column 8, lines 5-8).

In regard to claim 3, Scaduto, US 6,429,936, discloses the system of claim 1 wherein none of the pass bands of said filter overlap (see column 8, lines 15-19: each filter may be selected to pass different wavelengths of light so that none overlap).

In regard to claim 4, Scaduto, US 6,429,936, discloses the system of claim 1 wherein said filter comprises:

a plurality of separate filters (see figure 6, elements 212) having fixed pass bands (see column 8, lines 2-4); and

a switching device (see figure 6, element 200) operable to interpose each of said filters in an optical pathway between said lens and said optical detector (see column 9, lines 33-50).

In regard to claim 12, Scaduto, US 6,429,936, discloses the system of claim 1 wherein said filter comprises:

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a filter disk (see figure 6, element 210) having a plurality of individual filter windows (see figure 6, element 212), each said filter window having a fixed pass band associated with a different center wavelength (see column 8, lines 16-18), said disk being configured for rotation about an axis thereof to interpose a selected one of said filter windows in an optical pathway between said lens and said optical detector (see column 8, lines 2-4).

In regard to claim 15, Scaduto, US 6,429,936, discloses the system of claim 12 wherein the it is implied the pass band of each said filter window comprises +/- 20 nm from the center wavelength thereof, since the filter allows a single wavelength (see column 8, lines 4-5).

In regard to claim 20, Scaduto, US 6,429,936, discloses the system of claim 1 wherein said optical detector comprises a charge-couple-device (see figure 6, element 261).

In regard to claim 21, Scaduto, US 6,429,936, discloses the system of claim 1 wherein said control device comprises a microprocessor (see figure 6, element 280).

In regard to claim 22, Scaduto, US 6,429,936, discloses the system of claim 21 wherein said microprocessor selects the desired pass band based on at least one of an ambient visible light level and an ambient infrared light level (see column 6, lines 25-27).

In regard to claim 23, Scaduto, US 6,429,936, discloses the system of claim 22 further comprising:

a visible light sensor (see figure 6, element 261: the CDD serves as a visable light sensor) operable to measure the ambient visible light level; and

an infrared light sensor (see figure 6, element 261: the CDD serves as an infrared light sensor) operable to measure the ambient infrared light level.

In regard to claim 25, Scaduto, US 6,429,936, discloses the system of claim 21 wherein said lens comprises an auto-focus lens (see figure 6, element 230) controllable by said microprocessor, and wherein said microprocessor adjusts said auto-focus lens in order to focus the image of the subject on said optical detector based on a distance between said auto-focus lens and the subject.

In regard to claim 27, Scaduto, US 6,429,936, discloses the system of claim 21 wherein said microprocessor is operable to convert the electrical signal generated by said optical sensor into a video signal (see figure 6, element 261, SIGNAL OUT to display 263).

In regard to claim 28, Scaduto, US 6,429,936, discloses the system of claim 27 further comprising at least one video connector for outputting the video signal via a wired connection (see figure 6, element 261, SIGNAL OUT to display 263).

In regard to claim 31, Scaduto, US 6,429,936, discloses a method of obtaining an infrared image of a subject, said method comprising the steps of:

collecting optical energy conveyed from the subject (see column 7, lines 64-67);

selecting a desired one of a plurality of pass bands associated with a filter, wherein each pass band has a center wavelength associated therewith (see column 8, lines 2-5), the center wavelengths being within an infrared portion of the electromagnetic spectrum (see column 6, lines 24-28);

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filtering the collected optical energy in accordance with the selected pass band of the filter (see column 8, lines 2-5); and

generating an electrical signal representing an image of the subject from the filtered optical energy (see column 8, lines 30-40).

In regard to claim 32, Scaduto, US 6,429,936, discloses the method of claim 31 wherein said step of selecting includes the steps of:

measuring an ambient visible light level (see figure 6, element 261: the CDD serves as a visable light sensor measing the light);

measuring an ambient infrared light level (see figure 6, element 261: the CDD serves as a visable light sensor measuring the light);

choosing a pass band based on at least one of the measured ambient visible light level and the measured ambient infrared light level (see column 8, lines 19-25: the pass bands are chosen based on the light level or wavelength that produces that desired reaction in the image subject).

In regard to claim 34, Scaduto, US 6,429,936, discloses the method of claim 31 further comprising:

converting the electrical signal to a video signal (see column 8, lines 37-41); and

transmitting the video signal via a wired communications link (see figure 6, element 261, SIGNAL OUT to display 263).

In regard to claim 36, Scaduto, US 6,429,936, discloses the method of claim 31 wherein said step of selecting includes the step of:

system to interpose one of a plurality of separate filters having fixed pass bands in an optical pathway between a lens employed in said step of collecting and an optical detector employed in said step of generating (see column 8, lines 62-66 and column 10, lines 19-21 and 53-63: the PLD sends signals to control the movement of the filter wheel to selective the appropriate filter).

In regard to claim 38, Scaduto, US 6,429,936, discloses the method of claim 31 wherein said step of selecting includes the step of:

rotating a filter disk having a plurality of individual fixed pass band filter windows associated with a different center wavelengths to interpose an appropriate one of the filter windows in an optical pathway between a lens employed in said step of collecting and an optical detector employed in said step of generating (see column 8, lines 2-4 and column 10, lines 43-63).

In regard to claim 40, Scaduto, US 6,429,936, discloses an infrared camera system comprising:

a lens (see figure 6, element 168) configured to collect optical energy conveyed from a subject;

a filter (see figure 6, elements 110 and 210) providing a plurality of pass bands associated with different center wavelengths within an infrared portion of the electromagnetic spectrum, said filter being operable to pass filter optical energy collected by said lens in accordance with any selected one of its plurality

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of pass bands (see column 6, lines 24-29 and column 8, lines 2-8: plurality of bandpass filters range from 200-1000 nm);

an optical channel (see figure 6, element 170) between said lens and said filter;

an optical detector (see figure 6, element 261) operable to generate an electrical signal representing an image of the subject in response to optical energy collected by said lens, directed though said optical channel to said filter, pass filtered by said filter in accordance with the pass band of said filter, and subsequently incident on said optical detector (see column 8, lines 30-40); and

it is inherent the Scaduto reference comprises a micro-transmitter operable to transmit the electrical signal via at least one of a wired communications link and a wireless communications link, since the CCD camera output image data to a storage means 265 and a display 263 (see figure 6 and column 8, lines 37-41).

In regard to claim 41, Scaduto, US 6,429,936, discloses the system of claim 40 wherein said optical channel comprises a shield fiber optic cable or light guide (see figure 6, element 170).

In regard to claim 44, Scaduto, US 6,429,936, discloses the system of claim 40 wherein a focal length of said lens is fixed (see figure 6, element 168 and column 7, lines 59-62).

In regard to claim 45, Scaduto, US 6,429,936, discloses the system of claim 40 wherein the pass band of said filter is fixed (see column 6, lines 26-28).

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In regard to claim 46, Scaduto, US 6,429,936, discloses the system of claim 40 wherein said optical detector comprises a charge-couple-device (see figure 6, element 261).

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 5, 6, 13, 14, 29, 30, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaduto, US 6,429,936.

In regard to claim 5, Scaduto, US 6,429,936, discloses the system of claim 4. The Scaduto reference does not discloses wherein said plurality of separate filters specifically comprises first, second, third and fourth filters having pass bands centered around center wavelengths of 700 nm, 800 nm, 900 nm, and 1000 nm, respectively; however, the reference does discloses that the filters may be selected with so as to pass different wavelengths of light of any combination thereof (see column 8, lines 15-19).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Scaduto, US 6,429,936, to have first, second, third and fourth filters having pass bands centered around center wavelengths of 700 nm, 800 nm, 900 nm, and 1000 nm, respectively, in order to have the optimum wavelength ranges depending on the experiment and the sample.

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In regard to claim 6, Scaduto, US 6,429,936, discloses the system of claim 5 wherein it is implied the pass band of each of said first, second, third and fourth filters of the Scaduto reference are +/- 20 nm from the center wavelength thereof, since the filter allows a single wavelength (see column 8, lines 4-5).

In regard to claim 13, Scaduto, US 6,429,936, discloses the system of claim 12. The Scaduto reference does not disclose wherein the center wavelengths of the pass bands of said filter windows vary from a shorter wavelength to a longer wavelength in predetermined increments; however, the reference does discloses that the filters may be selected with so as to pass different wavelengths of light of any combination thereof (see column 8, lines 15-19).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Scaduto, US 6,429,936, to have the center wavelengths of the pass bands of said filter windows vary from a shorter wavelength to a longer wavelength in predetermined increments, in order to have the optimum wavelength ranges depending on the experiment and the sample.

In regard to claim 14, Scaduto, US 6,429,936, discloses the system of claim 13. The Scaduto reference does not disclose wherein the shorter wavelength is 700 nm, the longer wavelength is 1000 nm, and the predetermined increments are 10 nm; however, the reference does discloses that the filters may be selected with so as to pass different wavelengths of light of any combination thereof (see column 8, lines 15-19).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Scaduto, US 6,429,936, the shorter

wavelength is 700 nm, the longer wavelength is 1000 nm, and the predetermined increments are 10 nm, in order to have the optimum wavelength ranges at uniform increments depending on the experiment and the sample.

In regard to claims 29 and 35, Scaduto, US 6,429,936, discloses the system and method of claims 27 and 31, respectively. The Scaduto reference does not disclose further comprising a wireless transmitter for outputting the video signal via a wireless connection.

Official Notice is taken that it is well-known to one of ordinary skill in the art to have a camera comprising a wireless transmitter for outputting the video signal via a wireless connection, in order to transfer data to a remote location while remaining completely mobile and eliminating the need for connection cables.

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Scaduto, US 6,429,936, to have a wireless transmitter for outputting the video signal via a wireless connection, in order to provide the user with more freedom to operate while allowing data to be transmitted to remote locations.

In regard to claim 30, Scaduto, US 6,429,936, discloses the system of claim 29. The Scaduto reference discloses wherein said wireless transmitter comprises an 802.11 wireless transmitter.

Official Notice is taken that it is well-known to one of ordinary skill in the art to have a camera comprising a 802.11 wireless transmitter for outputting the video signal

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via a wireless connection, in order to transfer data to a remote location while remaining completely mobile and eliminating the need for connection cables.

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Scaduto, US 6,429,936, to have said wireless transmitter comprises an 802.11 wireless transmitter, in order to provide the user with more freedom to operate while allowing data to be transmitted to remote locations

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaduto, US 6,429,936, in view of Noemer et al, US 3,661,458.

In regard to claim 7, Scaduto, US 6,429,936, discloses the system of claim 4 wherein each said separate filter comprises glass retained within a ring (see figure 6, element 212 and column 6, lines 36-38); however, the Scaduto reference does not that the glass filter is retained in a metal ring.

Noemer et al, US 3,661,458, discloses a device with optical glass filters (see figure 1, elements 103a and 104a) retained within a metal ring (see figure 1, element 103 and 104) that are pivoted in and out of the optical axis by hinges (see figure 1, elements 5 and 6 and abstract).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Scaduto, US 6,429,936, in view of Noemer et al, US 3,661,458, to have the glass filter retained in a metal ring, in order to pivot a plurality of filters in and out of the optical path, thus making the system more compact.

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In regard to claim 8, Scaduto, US 6,429,936, in view of Noemer et al, US 3,661,458, discloses the system of claim 7. The Noemer reference discloses wherein said separate filters are coupled with said switching device by a hinge attached to said metal ring, said switching device being operable to pivot said filters about said hinge in order to selectively interpose said filters into said optical pathway (see abstract).

6. Claims 9-11 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaduto, US 6,429,936, in view of Bos et al., US 6,667,471.

In regard to claims 9 and 37, Scaduto, US 6,429,936, discloses the system and method of claims 1 and 31 wherein said filter comprises:

filter pane interposed in an optical pathway between said lens and said optical detector (see column 7, line 59 to column 8, line 4 and lines 30-37).

The Scaduto reference does not disclose wherein said filter pane provides a pass band having a center wavelength that is adjustable over a range of wavelengths in response to a voltage level applied thereto.

Bos et al., US 6,667,471, discloses an imaging system with a electro-optic filter see figure 8, element 118) provides a pass band having a center wavelength that is adjustable over a range of wavelengths in response to a voltage level applied thereto (see column 11, lines 35-39).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Scaduto, US 6,429,936, in view of Bos et al., US 6,667,471, wherein said filter pane provides a pass band having a center wavelength that is adjustable over a range of wavelengths in response to a voltage level applied

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thereto, in order to reduce the size and number of mechanical parts of the filtering mechanism.

In regard to claim 10, Scaduto, US 6,429,936, in view of Bos et al., US 6,667,471, discloses the system of claim 9. The Scaduto reference discloses wherein the range of wavelengths over which the center wavelength of the pass band of said filter pane is adjustable in ranges from a center wavelength of 700 nm to a center wavelength of 1000 nm (see column 6, lines 24-26: 700-1000 nm is within the 200-1000 nm range).

In regard to claim 11, Scaduto, US 6,429,936, in view of Bos et al., US 6,667,471, discloses the system of claim 10, wherein it is implied by the Scaduto reference that the pass band of said filter pane comprises +/- 20 nm from the center wavelength thereof, since the filter allows a single wavelength (see column 8, lines 4-5).

7. Claims 16, 17,19, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaduto, US 6,429,936, in view of Nakano et al., US 5,986,767.

In regard to claims 16 and 39, Scaduto, US 6,429,936, discloses the system and method of claims 1 and 31, respectively, wherein said filter comprises:

a filter disk (see figure 6, element 210) having a plurality of individual filter windows (see figure 6, element 212), each said filter window having a fixed pass band associated with a different center wavelength (see column 8, lines 16-18), said disk being configured for rotation about an axis thereof to interpose a different section of said filter disck in an optical pathway between said lens and said optical detector (see column 8, lines 2-4).

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The Scaduto reference does not disclose a filter disk having a pass band associated with a center wavelength that varies in a continuous manner proceeding around a circumference of said disk.

Nakano et al., US 5,986,767, discloses a camera system with a filter disk (12) having a pass band associated with a center wavelength that varies in a continuous manner proceeding around a circumference of said disk (see figure 22C and column 1, lines 54-59).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Scaduto, US 6,429,936, in view of Nakano et al., US 5,986,767, to have a pass band associated with a center wavelength that varies in a continuous manner proceeding around a circumference of said disk, in order to in order to have an inexpensive color classification apparatus having a simple arrangement.

In regard to claim 17, Scaduto, US 6,429,936, in view of Nakano et al., US 5,986,767, discloses the system of claim 16 wherein the center wavelength of the pass band of said filter disk varies from a shorter wavelength to a longer wavelength in a predetermined increment over a predetermined distance measured along the circumference of said filter disk (see fig. 22A and 22C).

In regard to claim 19, Scaduto, US 6,429,936, in view of Nakano et al., US 5,986,767, discloses the system of claim 16 wherein implied by the Nakano reference that the pass band of said filter disk comprises +/- 5 nm from the center wavelength thereof, since the filter allows a single wavelength for is section (see figures 22a and 22c).

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8. Claims 24 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaduto, US 6,429,936, in view of Harrison, US 5,051,768.

In regard to claims 24 and 33, Scaduto, US 6,429,936, discloses the system and method of claims 23 and 32, respectively, further comprising an infrared illumination source (see figure 6, element 10). The Scaduto reference does not disclose further comprising an infrared illumination source operable to transmit infrared optical energy in the direction of the subject when the ambient infrared light level measured by said infrared light sensor is determined by said microprocessor to be insufficient.

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Harrison, US 5,051,768, discloses an illumination source operable to transmit optical energy in the direction of the subject when the ambient infrared light level measured by said infrared light sensor is determined by said microprocessor to be insufficient (see column 10, line 49 to column 11, line 10).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Scaduto, US 6,429,936, in view of Harrison, US 5,051,768, to have an infrared illumination source operable to transmit infrared optical energy in the direction of the subject when the ambient infrared light level measured by said infrared light sensor is determined by said microprocessor to be insufficient, in order to automatically maintain sufficient lighting to capture the desired object.

9. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scaduto, US 6,429,936, in view of Shahar et al., US 6,124,934.

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In regard to claim 26, Scaduto, US 6,429,936, discloses the system of claim 25.

The Scaduto reference does not disclose further comprising a distance sensor operable to measure the distance between said auto-focus lens and the subject.

Shahar et al., US 6,124,934, discloses a camera system with a distance measure means for measuring the distance between said auto-focus lens and the subject (see abstract).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Scaduto, US 6,429,936, in view of Shahar et al., US 6,124,934, to have a distance sensor operable to measure the distance between said auto-focus lens and the subject, in order to provide a more stable and accurate distance measuring system to better focus the lens.

## Allowable Subject Matter

10. Claims 18, 42, and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,756,592 discloses an imaging system with an infrared filter wheel.

US 7,019,777, discloses a camera system with infrared filtering.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

gvs

TUAN HO
PRIMARY EXAMINER